

## BACKPLANE INTERFACE ADAPTER

### ABSTRACT OF THE DISCLOSURE

A backplane interface adapter for a high-performance network switch. The backplane interface adapter receives narrow input cells carrying packets of data and outputs wide striped cells to a switching fabric. One traffic processing path through the backplane interface adapter includes deserializer receivers, a traffic sorter, wide cell generators, stripe send queues, a backplane transmit arbitrator, and serializer transmitters. Another traffic processing path through the backplane interface adapter includes deserialize receivers, a stripe interface, stripe receive synchronization queues, a controller, wide/narrow cell translator, destination queues, and serializer transmitters. An encoding scheme for packets of data carried in wide striped cells is provided.

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